EN

# Bituma 1-K

Construction Chemicals > Waterproofing Products > Bitumen Rubber-Based

Bituma 1 K is a ready-to-use, single-component, elastic, waterproof, bitumen-based, polymer and rubber-modified, long-lasting liquid insulation material.

## Fields of Application

- Foundations, basements, retaining walls
- Curtains and all reinforced concrete surfaces in contact with soil

## Advantages

- Ready to use, can be easily applied with a brush, roller, or spray gun.
- Does not shine or catch fire as it is solvent-free.
- Being water-based, the product can be thinned with water and used as a primer.
- Bridges shrinkage cracks.
- Resistant to plant roots due to its bituminous content.
- Maintains elasticity at low temperatures.

## 1 Preparation of Substrate

The surface to be applied should be free of oil, dirt, rust, and all loose materials, and if necessary, the surfaces should be cleaned with a water jet. The surface to be applied must have sufficient strength. Wide cracks and tie rod holes on the cleaned surface are filled with Merks Repair Plus series repair mortars. Corner joints should be rounded with fillets.

## 2 Application

Bituma 1 K should be thoroughly mixed before use. It can be applied with a brush, roller, or suitable airless spray machines.
Generally, excellent results are achieved with an application thickness of 1.5 mm. This thickness should be achieved with two coats.

## 3 Consumption Rate

Consumption is approximately 1.5–2 kg/m$^2$ (for 1 mm thickness).

## 4 Points to Consider

- Application should be done on the surface exposed to positive water pressure.
- During application, the air should be dry and the temperature should be above +5°C, and the second coat should be applied perpendicular (90°) to the previous coat using a brush, roller, or sprayer.
- The material should be protected from freezing, and any product that has frozen should not be used as it will lose its properties once thawed.
- The applied surfaces of the retaining wall insulation should be protected with XPS and drainage boards.
- Bituma 1 K should not be preferred for water tank and pool insulations. For such details, Sealmax series products should be preferred.
- After finishing the job, tools should be cleaned with water.

## 5 Packaging

18 kg bucket

## 6 Storage Life

At least 12 months in sealed packaging and protected from freezing.








## **TECHNICAL** DATAS

PRODUCT FEATURES

| | |
|---|---|
| Appearance | Liquid |
| Color | Brown – Turns Black When Cured |
| Density (g/cm³): A / A+B | 1.15 g/cm³ ( ±0.04 ) |
| pH | 11 ( ±1 ) |
| Viscosity - Brookfield (mPa·s): | 4500 (rotor 6 - 60 RPM)* |
| Solid Content Ratio (A) (%) | % 65 ( ±%4 ) |
| Packaging Content | 17 kg |
| Application Temperature | +5°C / 30°C |
| Service Temperature | -20 °C / 80 °C |

| Main Characteristic | Method | Performance Value According to TS EN 15814 | Performans Değeri |
|---|---|---|---|
| Crack Bridging (+4°C) | EN 15812 | Class CB0: no requirement<br>Class CB1: 1 mm crack bridging at 3 mm thickness<br>Class CB2: 2 mm crack bridging at 3 mm thickness | CB2 |
| Water Resistance | EN 15817 | 1. No color change in water.<br>2. No separation from the mesh in mesh-reinforced application. | PASS |
| Flexibility at Low Temperature (0°C) | EN 15813 | No cracking | PASS |
| Dimensional Stability at High Temperature (70°C) | EN 15818 | No flow or slip | PASS |
| Reduction in Thickness After Full Curing | EN 15819 | ≤ 50% | ≈ 35% |
| Reaction to Fire | EN 13501-1 | Euroclass | E |
| Water Impermeability (1 mm crack) | EN 15820 | Class W1: ≥ 24 hours at 0.0075 N/mm² pressure, dry film thickness without mesh reinforcement ≥ 3 mm<br>Class W2A: ≥ 72 hours at 0.075 N/mm² pressure, dry film thickness with mesh reinforcement ≥ 4 mm<br>Class W2B: ≥ 24 hours at 0.075 N/mm² pressure, dry film thickness without mesh reinforcement ≥ 4 mm | W1 |
| Rain Resistance (23°C, 50%) | EN 15816 | Class R1: Up to 24 hours<br>Class R2: Up to 8 hours<br>Class R3: Up to 4 hours | R1 |

*Production viscosity; may increase over time.